

AMENDMENT UNDER 37 C.F.R. §1.111
U.S. Application No. 09/856,362

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. *(Currently amended)* A very broad band wavelength division multiplexed transmission system comprising optical media for carrying signals subject to a Raman effect, said system further comprising means for compensating energy transfers between channels caused by the Raman effect over the very broad band.

2. *(Original)* The system of claim 1, characterized by a bandwidth greater than 20 THz.

3. *(Original)* The system of claim 1, characterized by a bandwidth greater than 30 THz.

4. *(Previously presented)* The system of claim 1, characterized in that said band extends beyond 1620 nm.

5. *(Previously presented)* The system of claim 1, characterized in that the compensation means compensate depletion in channels over the beginning of the band.

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6. *(Original)* The system of claim 5, characterized in that the compensation means compensate depletion in the channels at the beginning of the band over a bandwidth lying in the range 13 THz to 21 THz.

7. *(Previously presented)* The system of claim 1, characterized in that the compensation means compensate enrichment of channels over the end of the band.

8. *(Original)* The system of claim 7, characterized in that the compensation means compensate enrichment of the channels over the end of the band over a bandwidth lying in the range 13 THz to 21 THz.

9. *(Cancelled).*

10. *(Currently Amended)* The system of claim 7, characterized in that the enrichment of channels over the end of the band ~~compensation means~~ ~~comprise means~~ is compensated for by the system emitting using lower powers for channels near ~~over~~ the end of the band than for channels elsewhere in the band.

11. *(Currently amended)* A very broad band optical amplification system comprising optical media for carrying signals subject to a Raman effect, said system further comprising compensation means for compensating energy transfers between channels caused by the Raman effect over the very broad band.

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12. *(Original)* The system of claim 11, characterized by a bandwidth greater than 20 THz.

13. *(Original)* The system of claim 11, characterized by a bandwidth greater than 30 THz.

14. *(Previously presented)* The system of claim 11, characterized in that the compensation means compensate depletion in the channels over the beginning of the band.

15. *(Original)* The system of claim 14, characterized in that the compensation means compensate depletion in the channels over the beginning of the band over a bandwidth lying in the range 13 THz to 21 THz.

16. *(Previously presented)* The system of claim 14, characterized in that it comprises distributed amplification means over the beginning of the band.

17. *(Original)* The system of claim 16, characterized in that the distributed amplification means comprise Raman amplification means.

18. *(Previously presented)* The system of claim 16, characterized in that the distributed amplification means comprise rare earth amplification means.

19. *(Previously presented)* The system of claim 11, characterized in that the compensation means compensate enrichment of the channels over the end of the band.

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20. *(Original)* The system of claim 19, characterized in that the compensation means compensate enrichment of the channels over the end of the band over a bandwidth lying in the range 13 THz to 21 THz.

21. *(Previously presented)* The system of claim 1, characterized in that said band extends beyond 1650 nm.

22. *(Previously presented)* The system of claim 1, characterized in that said band extends beyond 1670 nm.

23. *(New)* The system of claim 7, characterized in that the compensation means comprise at least one attenuator.

24. *(New)* A very broad band wavelength division multiplexed transmission system comprising an optical fiber for carrying signals subject to a Raman effect, wherein the optical fiber further provides linear losses to compensate enrichment of channels over the end of the very broad band.

25. *(New)* The system of claim 19, wherein the compensation means attenuate the enrichment of the channels over the end of the very broad band in a distributed way.